

## **Section III - Field Office Technical Guide**

# **Quality Criteria**

- **Definitions**
- **Minimum Quality Criteria**
- **Assessment Tools**

### **Quality Criteria Defined**

Quantitative or qualitative statements of the treatment level required to achieve a resource management system for identified resource considerations for a particular land use.

Quality criteria are usually established for protection, maintenance or improvement of the resources. However, criteria may be established at a level that accepts some degradation of the resource for designated programs e.g "Alternative Conservation Systems – ACS" for the "Highly Erodible Land – HEL" provisions of the Farm Bills.

### **Introduction**

These guidelines help establish the treatment level necessary to adequately address the resource concerns / problems / opportunities and human considerations that are identified during the planning process for the development of "Resource Management Systems – RMS". The RMS criteria are met when treatment has been planned that when applied, will resolve all of the identified and potential resource concerns / problems / opportunities. The RMS will be considered applied when all of the conservation practices that make up the RMS have been installed according to the Conservation Practice Standards in Section IV, Field Office Technical Guide (FOTG).

In some instances, individual client actions cannot solve an existing conservation problem in accordance with the quality criteria. In these instances, an opportunity exists for group planning to meet the respective quality criteria. In cases where the client cannot solve the problem as an individual, the quality criteria will be met if actions of the client are not contributing to the problem.

Quality criteria for the five resources (Soil, Water, Air, Plants, Animals) can be found in this Section III of the FOTG under the "Ohio Quality Criteria".

## Minimum Quality Criteria

RESOURCE CONCERNS	DEFINITIONS	QUALITY CRITERIA	ASSESSMENT TOOL
<b>Soil Resource Concerns and Quality Criteria</b>			
<b>1. Erosion</b>			
a. Sheet and rill	Erosion caused by rainfall, snowmelt, and surface water runoff whose flow channels are normally obscured by mechanical means.	Soil Loss Tolerance "T"	Current erosion prediction tool i.e. Revised Universal Soil Loss Equation (RUSLE or RUSLE2)
b. Wind	Erosion caused by wind	Soil Loss Tolerance "T"	Current erosion prediction tool i.e. Wind Erosion Equation (WEQ)
c. Concentrated Flow	Flow channels that are not normally obscured by mechanical means	Stable flow area with no evidence of head cuts or down cutting	Volume calculation and Visual Observation
d. Stream Bank	Accelerated sloughing of soil from stream banks caused by stream flows, ice flows, over bank flows, unstable soils, obstructions and trampling (including domestic animal and human activity, or heavy equipment use), or all or any combination of these conditions	Assessment tool shows condition of stream is healthy or as good as it can be given the conditions that exist upstream.	Stream assessment tool (i.e. Stream Visual Assessment Protocol, Proper Functioning Condition (PFC)), Visual Observation.
e. Roadbank and construction site erosion	Erosion that occurs on established roadbanks and erosion that occurs on construction sites during construction.	Conditions that stabilize the site and safely convey overland flow to not adversely impact the planned use of the land and/or contribute to offsite damages.	Current erosion prediction tools (WEQ or RUSLE), or volume calculations, or visual observations.
<b>2. Soil Condition</b>			
a. Tilth	Physical condition of the soil relating to its ease of tillage and fitness as a seedbed which provide a low level of impedance to seedling emergence and root penetration	The calculation of the Soil Condition Rating Index value will reflect a positive soil condition for cropland.	Soil conditioning index, aggregate stability test in Soil Quality test kit, or the Soil Quality Scorecard.

	DEFINITIONS	QUALITY CRITERIA	ASSESSMENT TOOL
<b>Water Resource Concerns and Quality Criteria</b>			
<b>1. Quantity</b>			
a. Runoff and flooding	Water from overland flow or seeps, both natural and manmade and the management of water accumulations on soil surfaces.	Surface water is managed to remove excess amounts in accordance with the planned utility of the area. In those instances where the management of excess surface water is restricted because of policy and laws, such as those pertaining to wetlands and riparian areas, the criteria will be met if policy and laws are followed.	Ohio Drainage Guide and/or the goals and objectives of the decisionmaker.
b. Excess Subsurface Water	The excess subsurface water in the soil profile that may inhibit the planned use of the area.	Subsurface water is managed to limit periods of saturation in accordance with the planned utility of the area. In those instances where the management of saturation is restricted because of policy and laws, such as those pertaining to wetlands, the criteria will be met if policy and laws are followed.	Ohio Drainage Guide and/or the goals and objectives of the decisionmaker.
<b>2. Quality</b>			
a. Groundwater contaminants	Beneficial uses of groundwater are impacted by contaminants	Appropriate Risk Assessment Tool resulting in a low rating; or within the minimum criteria for Standards 590, 633, and 595 as applicable.	Risk Assessment Tool i.e. Nitrogen Leaching Index, Pesticide Leaching Index, WIN-PST
b. Surface contaminants	Beneficial uses of surface water are impacted by contaminants (sediment, nutrients, pesticides, other organics)	Appropriate Risk Assessment Tool resulting in a low rating; or within the minimum criteria for Standards 590, 633, and 595 as applicable.	Risk Assessment Tool, i.e., Phosphorus Leaching Index, Soil Test Phosphorus Assessment, Pesticide Runoff Index, WIN-PST, Current Erosion Prediction Tools.

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Air	DEFINITIONS	QUALITY CRITERIA	ASSESSMENT TOOL
<b>Air Resource Concerns and Quality Criteria</b>			
a. Chemical Drift	Chemical drift does not adversely affect humans and/or nontarget plants, animals, or sensitive water bodies.	Chemicals applied according to label directions and in compliance with applicable federal, state, and local laws and regulations.	Visual observations. Pesticide labels. Pesticide Application Records.
b. Airborne Odors	Intensity and duration of odors cause continuing complaints from neighboring landowners.	Reasonable odor control measures are employed on the farm.	Detection devices. Human detection.
c. Airborne soil particulates (dust).	Airborne particulates (dust) that may cause offsite visibility problems or damage to property offsite.	Airborne soil particulates (dust), applicable to wind erosion only, is the treated area annually managed within the wind erosion tolerance of "T" for the soil type or map unit listed in Section II, FOTG.	Current wind erosion prediction technology (WEQ, RWEQ, WEPS).
<b>Plant Resource Concerns and Quality Criteria</b>			
a. Cropland Productivity	Crops are of a kind and/or quality that do not meet the landowner's objectives and may not sustain the resource	A healthy, vigorous stand capable of meeting 75% of the producers established yield goal.	Comparison to similar crops in the area with different management. Crop consultant information, producer yields, soils data.
b. Hayland / Pastureland Productivity and Health	Plant communities do not produce forage and/or cover in the quantity, quality and timeliness needed to meet decision-maker objectives and sustain the resource	A healthy, vigorous stand capable of meeting 75% of the producers established yield goal.	National Pasture & Range Handbook (Pasture Inventory Worksheet and Pasture Condition Score Sheet).

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Plants (con't)	DEFINITIONS	QUALITY CRITERIA	ASSESSMENT TOOL
<b>Plant Resource Concerns and Quality Criteria - Continued</b>			
a4. Forestland Productivity and Health	Plant communities do not produce wood fiber in the quantity, quality and timeliness needed to meet decisionmaker objectives and sustain the resource	Forest overstory stocking levels are within 25% of the "D+" spacing guide or equivalent for the particular site and stand composition; trees within the stand are uniformly distributed. Bare mineral soil comprises 50% or less of ground surface area.	Woodland transect procedure or visual observation of stand and composition.
<b>Animal Resource Concerns and Quality Criteria</b>			
a. Domestic	Domestic animal habitat does not consist of suitable food, cover/shelter and water. The animal must be healthy in order to have optimum mobility throughout its habitat	Domestic animals are provided adequate shelter; cover; sufficient quantity and quality of water to meet daily needs; and quantity and quality of food is adequate to meet their nutritional requirements	National Pasture and Range Handbook, NUTBAL, Forage Inventory (ECS-20, ECS-19), Forage Balance Worksheet (ECS-1)
b. Wildlife	Wildlife habitat does not consist of suitable food, cover/shelter, water and space	Wildlife habitat evaluation guide for the species of concern yields an index of 0.4 or greater for the land use	Wildlife habitat evaluation guide index (or other suitable tool).

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